



AQUACULTURE

Genetics and Reproduction Group

The major focus of the Genetics and Reproduction Group is on the management of broodstock and the production of fish as a controllable and sustainable resource. This involves studies of the control of maturation and puberty, the development and management of programmes of selective breeding, the mechanisms involved in sex differentiation and gender control, and basic research on important traits and genes. All of these areas combine the use of the newer techniques of molecular biology and genomics with whole animal studies of physiology and function, in particular where they are relevant to commercial culture. A major thrust in recent years has been the application of this expertise to questions raised by the ever-expanding interests in new aquaculture species and species diversification, particularly with regards to marine fish. The group also makes a major contribution to the research of the Nutrition and Disease Groups, especially through its genomics and molecular genetics activities.

We carry out our research in recently refurbished state of the art laboratories in Stirling equipped with the latest equipment for DNA sequencing and fragment analysis, quantitative PCR and functional genomic analysis. We have our own excellent freshwater and marine fish holding research facilities, and work with industrial partners in the UK fish farming sector and with a wide variety of collaborating institutions worldwide when we undertake large scale commercial trials. Research funding and postgraduate studentships have come from a variety of public and commercial organizations, including BBSRC, NERC, the European Community, DFID, DEFRA, TSB, fish breeders, on growers and feed manufacturers, and various national governments.

For further information on the Genetics and Reproduction Group, contact aquaculture@stir.ac.uk or tel +44 (0)1786 467874

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RESEARCH THAT SHAPES AND IMPROVES LIVES